



## Nonambulatory Equids in the United States

The Farm Security and Rural Investment Act of 2002 (Farm Bill) requested that U.S. Department of Agriculture (USDA) investigate the scope, causes, and handling practices of nonambulatory livestock in the United States. In partial response to the request, the USDA's National Animal Health Monitoring System (NAHMS) Equine 2005 study included questions about nonambulatory equids.

For the Equine 2005 study, NAHMS collected data on equine health and management practices from a representative sample of operations with 5 or more equids in 28 States divided into 4 regions.\* The 28-State target population represented 78.0 percent of equids and 78.6 percent of operations with 5 or more equids in the United States. Interviews were conducted from July 18 through August 12, 2005, and 2,893 equine operations provided data on equine health and management. Over 95 percent of operations had horses and 34.8 percent had equids other than horses, e.g., donkeys, burros, mules, ponies, and miniature horses.

For this study, a resident equid was defined as an equid that spent or was expected to spend more time at the operation than at any other operation, whether or not it was present at the time of the interview. The operation was its home base.

A nonambulatory equid was defined as an equid unable to stand or rise on its own without assistance for any length of time, or an equid that could stand but not walk. An equid was considered nonambulatory even if the time frame of the condition was very brief, and equids affected for any length of time were classified as nonambulatory. This definition was utilized to meet the needs of the Farm Bill request as well as for consistency across species.

**\*Regions:**

**West:** California, Colorado, Montana, New Mexico, Oregon, Washington, and Wyoming

**Northeast:** New Jersey, New York, Ohio, and Pennsylvania

**South:** Alabama, Florida, Georgia, Kentucky, Louisiana, Maryland, Oklahoma, Tennessee, Texas, and Virginia

**Central:** Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, and Wisconsin

### Prevalence of nonambulatory equids

Overall, 5.2 percent of operations had one or more resident equids become nonambulatory during the previous 12 months (table 1). The percentages of operations where any resident equids became nonambulatory were similar across regions, ranging from 4.2 percent in the West region to 8.3 percent in the Northeast region.

**Table 1. Percentage of operations where any resident equids became nonambulatory during the previous 12 months, by region:**

Percent Operations				
Region				
South	Northeast	West	Central	All Ops.
Percent	Percent	Percent	Percent	Percent
4.9	8.3	4.2	5.2	5.2

The percentage of operations where one or more resident equids became nonambulatory during the previous 12 months increased as operation size increased. Higher numbers of resident equids on large operations provide more opportunities for the occurrence of events that could result in nonambulatory equids.

For all operations, 0.6 percent of resident equids became nonambulatory during the previous 12 months, while 0.2 percent of donkeys or burros and miniature horses, 0.6 percent of mules and horses (excluding miniature horses), and 0.5 percent of ponies became nonambulatory.

### Age of nonambulatory equids

Similar percentages of equids by age category from birth to less than 20 years became nonambulatory during the previous 12 months. The highest percentage of equids that became nonambulatory during the previous 12 months (10.4 percent) were 30 years of age or older (table 2).

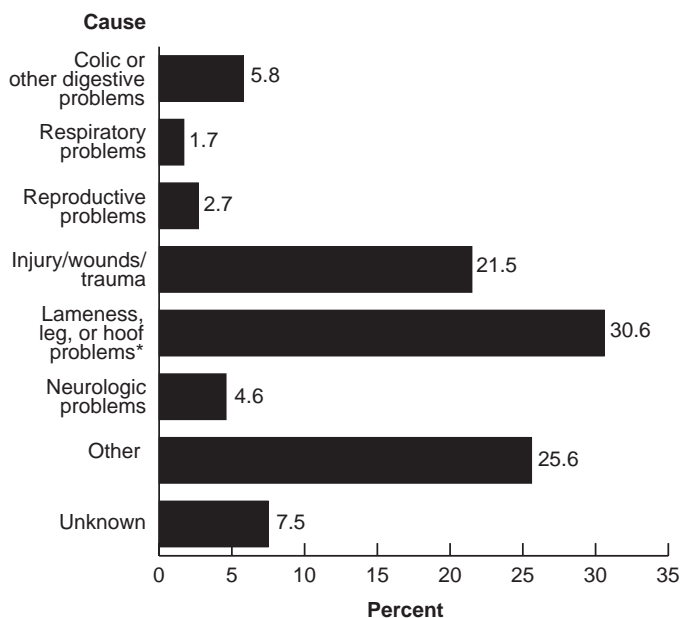
**Table 2. Percentage of resident equids that became nonambulatory during the previous 12 months, by age:**

Age	Percent Resident Equids
Birth to 30 days	0.2
More than 30 days but less than 6 months	0.3
6 months to less than 5 years	0.4
5 years to less than 20 years	0.5
20 years to less than 30 years	1.8
30 years or more	10.4

### Primary causes of nonambulatory condition

Injury/wounds/trauma and lameness together accounted for half (52.1 percent) of nonambulatory equids 6 months of age and older. Old age was the most common “other” cause of nonambulatory resident equids aged 6 months or more. Heart problems, toxicity/poisoning, and heat stroke were also included in the “other” category (figure 1). It is important to remember that the duration an animal was in a nonambulatory state could be very brief, i.e., any length of time. For example, a horse with colic that was nonambulatory for just an hour and then recovered would have met the case definition of nonambulatory.

**Figure 1. For Resident Equids Aged 6 Months or More that Became Nonambulatory During the Previous 12 Months, Percentage of Equids by Primary Cause of Nonambulatory Condition**



\*Equid could not be used for intended purpose without treatment

### Outcome

Nearly one of five nonambulatory equids (17.6 percent) recovered to full function and remained on the operation, while 7.4 percent recovered partially and remained on the operation. Nearly three of four nonambulatory equids (71.6 percent) died or were euthanized: 24.7 percent died (not euthanized), and 46.9 percent were euthanized (table 3). These percentages are not unexpected, as conditions that lead to a nonambulatory state can be severe.

**Table 3. For resident equids that became nonambulatory during the previous 12 months, percentage of nonambulatory equids by outcome:**

Outcome	Percent Equids
Died (not euthanized)	24.7
Euthanized	46.9
Recovered to full function and remained on operation	17.6
Recovered to full function and sold or moved off operation	1.4
Recovered to partial function and remained on operation	7.4
Recovered to partial function and sold or moved off operation	0.1
Moved off operation while nonambulatory	0.0
Other	1.9
Total	100.0

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